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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,727	07/30/1999	STEPHEN L. SCARINGELLA	E0295/7126WR	9805

7590 04/16/2003

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EXAMINER

VO, TIM T

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/364,727

Applicant(s)

SCARINGELLA ET AL.

Examiner

Tim T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s) _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4,6 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfman et al. U.S. Patent No. 6,118,862 in view of Don et al. U.S. Patent No. 6,266,740. Referring to claims 1,6,12 and 13, Dorfman et al. discloses a computer system that includes a circuit board, specifically a processor board that has a processor, a memory and a disk controller (column 4, line 17). The system also includes a backplane that has a plurality of slots that are adapted to accept plug-in boards (column 4, lines 30-33). In the system, the processor board is adapted to be received into a slot on the backplane establishing a connection between the processor board and the backplane (column 4, line 42). It is also disclosed that the processor board is in communication with any devices (such as circuit boards) that are installed in the available slots of the backplane (column 4, line 44). Dorfman et al. does not disclose storing product data of the processor board on the memory. However, Don et al. teaches a method that establishes a memory space within local memory for storing ID data (ID codes), such as cabinet serial number, device number, among others (column 5, line 54). Therefore, it would have been obvious to one having ordinary skill in the art

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at the time of the invention to modify Dorfman's invention to include product data on the memory that is included on the processor boards in order for each board to have its own unique identification means.

Referring to claims 2-4 and 14, Dorfman et al. further teaches the use of a read only memory (ROM) on the processor boards in his system (column 4, line 22). Also, it is well known in the art that other types of ROM can be used such as EEPROMs among other types of ROM.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfman et al. in view of Don et al. as applied to claim 1, and further in view of. Wilhelm U.S. Patent No. 5,761,033. Dorfman et al., as modified, discloses a computer system that includes a circuit board, specifically a processor board that has a processor, a memory (ROM) and a disk controller. Product data is stored in the ROM on included in the circuit board. The system also includes a backplane that has a plurality of slots that are adapted to accept plug-in boards. In the system, the processor board is adapted to be received into a slot on the backplane establishing a connection between the processor board and the backplane. Dorfman does not disclose that external access is provided, via the backplane, to the circuit boards that are installed in the plurality of slots of the backplane. However, Wilhelm teaches a system where external access is provided via bus receptacles on a backplane. The backplane has a plurality of bus lines interconnecting the bus receptacles and forming a system bus for carrying power, address, data and other signals (column 9, lines 34-39). Therefore, it would have been

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obvious to one having ordinary skill in the art at the time of the invention to modify Dorfman's invention to include such a backplane in order to provide external access to the backplane and, there forth, providing external access to the devices installed on the backplane.

3. Claims 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfman et al. in view of Don et al. as applied to claim 1. Referring to claims 7 and 11, Dorfman et al., as modified, discloses a computer system that includes a circuit board, specifically a processor board that has a processor, a memory (ROM) and a disk controller. Product data is stored in the ROM on included in the circuit board. The system also includes a backplane that has a plurality of slots that are adapted to accept plug-in boards. In the system, the processor board is adapted to be received into a slot on the backplane establishing a connection between the processor board and the backplane. It is also disclosed that the processor board is in communication with any devices (such as circuit boards) that are installed in the available slots of the backplane. Dorfman does not disclose the use of an array of storage devices or cache memory. However, Don et al. teaches the use of a global memory that serves as a very large cache, which is used as a staging area during the transfer of data between the host computer and the storage devices (disk arrays) that are used in his invention (column 3, line 55). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dorfman's invention to include such a global memory

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that includes cache memory in order for the circuit boards to have a staging area to control data transfers between the host computer and the storage devices (disk arrays).

Referring to claims 8 and 9, Dorfman et al. further teaches the use of a read only memory (ROM) on the processor boards in his system (column 4, line 22). Also, it is well known in the art that other types of ROM can be used such as EEPROMs among other types of ROM.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfman et al. in view of Don et al. as applied to claim 7, and further in view of Wilhelm. Dorfman et al., as modified, discloses a computer system that includes a circuit board, specifically a processor board that has a processor, a memory (ROM) and a disk controller. Product data is stored in the ROM on included in the circuit board. The system also includes a backplane that has a plurality of slots that are adapted to accept plug-in boards. In the system, the processor board is adapted to be received into a slot on the backplane establishing a connection between the processor board and the backplane. It is also disclosed that the processor board is in communication with any devices (such as circuit boards) that are installed in the available slots of the backplane. Dorfman does not disclose that external access is provided, via the backplane, to the circuit boards that are installed in the plurality of slots of the backplane. However, Wilhelm teaches a system where external access is provided via bus receptacles on a backplane. The backplane has a plurality of bus lines interconnecting the bus receptacles and forming a system bus for carrying power, address, data and other

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signals (column 9, lines 34-39). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dorfman's invention to include such a backplane in order to provide external access to the backplane and, there forth, providing external access to the devices installed on the backplane.

Response to Arguments

5. In response to the applicant arguments that Dorfman and Don do not teach an apparatus comprising a plurality of circuit boards, each having electronic circuitry including a non-volatile memory containing product data that identifies the respective circuit board and means for reading the product data in the non-volatile memory, and a back plane for mounting and interconnecting the circuit board. In the office action, examiner cited that Dorfman teaches an apparatus comprising plurality circuit boards i.e. plurality of processor cards are inserting into plurality of slots 62a-62f to a back plane 60 as shown in figure 2. Dorfman does not expressly teach wherein each of the plurality of processor cards containing product data in the non-volatile memory. Dorfman further added that such processor boards, are well known in the art, thus, it should be appreciated that other hardware configurations could be utilized (column 4 lines 55-60). This suggestion suggested that other hardware configurations could be utilized. For this reason, the examiner combined the teaching of Don because Don providing a local memory for storing ID data (ID codes) such as cabinet serial number, device number (column 5 line 54). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dorfman's invention to

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include product data on the memory that is included on the processor boards in order for each board to have its own unique identification means.

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.


XUAN M. THAI
PRIMARY EXAMINER
TC2100

T.V

April 10, 2003